

**METHODS AND APPARATUS FOR ESTABLISHING DYNAMIC TUNNEL
ACCESS SESSIONS IN A COMMUNICATION NETWORK**

ABSTRACT OF THE DISCLOSURE

5 A method and apparatus for implementing dynamic tunnel access sessions at a
network device within a communications network. The tunnel access sessions are created
between a network device, typically a gateway device and a network service, such as the
Internet or a corporate intranet. The dynamic tunnel access sessions provide for
subscriber-transparent tunneling. The present invention does not require special client-
10 side software to be loaded on the remote host of the subscriber, and does not require any
manual configuration of the remote host. A subscriber is capable of establishing more
than one tunnel access session to more than one network service during a network
session. Additionally, more than one subscriber who accesses the communication
network via the network device is able to establish a communication link with a pre-
15 existing tunnel.

#4429032v1

000001-0900000